

REMARKS/ARGUMENTS

Claims 1-38 were previously pending in this application. Claims 1-38 have been rejected. Claims 1, 19, 20 and 38 have been amended, and claim 39 added. It is believed that pending claims 1-39 are now each in allowable form.

I. Objection to the Drawing

In the Office Action, specifically in paragraph 1, the drawings were objected to because reference character "151a" was used twice - to designate both recess and locking aperture in Fig. 4B. Fig. 4B has now been corrected and is attached on the "Replacement Sheet" attached hereto. The locking aperture which was previously incorrectly designated 151a is now properly identified as 152a.

The drawings now comply with the requirements of 37 CFR 1.84 and 37 CFR 1.121 and therefore the objection to the drawing should be withdrawn.

II. Objection to the Specification

In the Office action, specifically in paragraph 2, the specification was objected to because of informalities with respect to the title. The original title has now been replaced with the title "SUPPORT FOR BACKLIGHT MODULE" and is now in compliance with 37 CFR 1.72(a) and MPEP § 606. The objection to the specification should therefore be withdrawn.

III. Rejection of Claims 1 and 20 under 35 U.S.C § 102

In the Office Action, specifically in paragraph 3, claims 1 and 20 were rejected under 35 U.S.C § 102(b) as being anticipated by Endo et al. (US Pat No. 5,064,276), hereinafter Endo. Applicants respectfully submit that these claim rejections are overcome based on reasons set forth below.

Claims 1 and 20 are each independent claims. Each of claims 1 and 20 has been amended. As amended, independent claim 1 recites the features of:

the groove of the first member is disposed beneath the second member;
second member having an elongated body for supporting a diffuser plate of the backlight assembly when it attempts to sag or distort; and
the second member extends from the first member.

Similarly, amended independent claim 20 recites the features of:

the groove of the first member disposed beneath the second member; and
a second member having an elongated body for supporting the diffuser plate when it attempts to sag or distort, the second member extending from the first member.

In sum, the member that supports the diffuser plate [the second member] extends from another member [the first member] which includes a groove for receiving a lamp, which is disposed beneath the member that supports the diffuser plate. In contrast, the only feature of Endo that might support the diffuser plate 6 is transparent plate 4A as pointed out by the Examiner. Member 4C (reflector plate 4C) which retains the light source, is disposed laterally with respect to transparent plate 4A and not beneath it as in the claimed invention. Reflector plate 4C does not include a groove disposed beneath the member 4A that the Examiner contends supports the diffuser plate. Claims 1 and 20 therefore recite features neither disclosed nor suggested by Endo and the rejection of claims 1 and 20 under 35 U.S.C § 102(b) as being anticipated by Endo, should be withdrawn.

IV. Rejection of Claim 19 under 35 U.S.C. § 102(e)

In the subject Office action, specifically in paragraph 4, claim 19 was rejected under 35 U.S.C. § 102(e) as being anticipated by Tsai et al. (US Pat No. 6,722,733),

hereinafter Tsai. Applicants respectfully submit that this claim rejection is overcome based on reasons set forth below.

Independent claim 19 has been amended, and now recites the feature of "a body with a groove extending through the body for holding a lamp of the backlight assembly". Tsai, in sharp contrast, provides semicircular fingers that extend no more than half way around the lamp. The feature alleged by the Examiner to comprise a groove of Tsai, is the inner surface of this semicircular member. Tsai clearly does not disclose a groove *extending through* a body. Amended independent claim 19 is therefore distinguished from the reference of Tsai and the rejection of claim 19 under 35 U.S.C. § 102(e) should be withdrawn.

V. Rejection of Claim 38 under 35 U.S.C. § 102(e)

In the Office Action, specifically in paragraph 5, claim 38 was rejected under 35 U.S.C. § 102(e) as being anticipated by Tsai. Applicants respectfully submit that this claim rejection is overcome based on reasons set forth below.

The support member of Tsai, for example first member 220 identified by the Examiner, does not include a groove that extends *through* the member as in amended claim 38 which recites "a first member having a body and a groove extending through the body for holding the lamp". Amended independent claim 38 therefore includes features not disclosed by Tsai and therefore the rejection of claim 38 under 35 U.S.C. § 102(e) should be withdrawn.

VI. Rejection of Claims 1-4, 7, 10-13 under 35 U.S.C. § 103(a)

In the Office Action, specifically in paragraph 6, claims 1-4, 7 and 10-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee (US Pub.

2002/0044437). These rejections are believed to be overcome based on reasons set forth below.

The feature alleged by the Examiner to be the lamp-receiving grooves 22 of Lee are not disposed beneath and do not extend from the Lee feature alleged by the Examiner to be the second member having an elongated body (61). Therefore independent claim 1 includes features that distinguish applicants invention from Lee.

The Examiner than states that it would have been obvious "to modify the first member to incorporate the lamp-receiving groove in order to provide a simple, compact support within the backlight unit, whereby "two birds are killed with one stone" in that a single support is used for both the lamps and diffuser plate", subject Office Action, page 5, last 4 lines. Applicants respectfully disagree and submit that the Examiner has not upheld his responsibility of establishing a prima facie case of obviousness. There is no suggestion at all in Lee to combine these two clearly separate features. The Examiner has combined features using hindsight reconstruction and without any evidence supporting the combination. The Examiner presented no evidence that one would combine the features in the proposed manner, other than that offered in applicants' application. If anything, Lee teaches away from combining the features because the support members (contact portion 61) are disposed centrally within the backlight assembly to support the diffuser plate and prevent it from sagging – "diffusion plate supporters 60 are preferably provided at an optimal position to equally divide an area of the diffusion plate 50", Lee, paragraph 39. The grooves 22 are part of the lamp supporter 20 located only at opposed ends of the mold frame 10 – "lamp supporter 20 is disposed preferably at both ends of the mold frame 10 in the lengthwise direction to

receive both ends of the lamps 30", Lee, paragraph 36. There is no suggestion to move the lamp supporter 20 away from the opposed ends of the mold frame and there is no suggestion to modify the diffusion plate supporter 60 or the contact portion 61, much less move them to the periphery where they could not adequately support the diffusion plate. The Examiner has not provided any evidence at all supporting any suggestion to combine the features and therefore the Examiner has not upheld the burden of establishing prima facie obviousness.

It would therefore not be obvious for one to combine the distinct features of the contact portion 61 and the lamp-receiving grooves 22 to form the claimed invention. As such, the rejection of claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Lee, in view of the Examiner's comments, should be withdrawn. Since claims 2, 3, 4, 7 and 10-13 depend from claim 1, the rejection of claims 2, 3, 4, 7 and 10-13 under 35 U.S.C. § 103(a) should similarly be withdrawn.

VII. Rejection of Claims 5-6 and 8-9 under 35 U.S.C. § 103(a)

In the Office Action, specifically in paragraph 13, claims 5-6 and 8-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee as applied to claims 4 and 7, respectively, and further in view of Marsh (US Pat. No. 6,471,388). These claim rejections are overcome based on the reasons set forth below.

Claims 5, 6, 8 and 9 are dependent claims that depend, indirectly, from amended independent claim 1. Amended independent claim 1 is distinguished from Lee for reasons set forth above. The cited reference of Marsh is not directed to liquid crystal display backlight assemblies as is the claimed invention, but, rather, is directed to display signs such as "EXIT" signs displayed in buildings. The cited reference of Marsh

has apparently been relied upon for disclosing lamp holders that mechanically and electrically couple the lamps and include resilient sockets and clamps. The cited reference of Marsh therefore does not make up for the above-stated deficiencies of Lee and therefore claims 5, 6, 8 and 9, by way of their dependency from claim 1, are distinguished from the references of Lee and Marsh. Claims 5 and 6 additionally incorporate the feature (recited in claim 3) of a frusto-conical shape. Marsh does not disclose or suggest such a shape and therefore claims 5 and 6 include further features that distinguish the applicants' invention from the reference of Marsh.

Therefore, the rejection of claims 5, 6 and 8-9 under 35 U.S.C. § 103(a) as being unpatentable over Lee and further in view of Marsh, should be withdrawn.

VIII. Rejection of Claim 14 under 35 U.S.C. § 103(a)

In the Office Action, specifically in paragraph 14, claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee as applied to claim 13 and further in view of Marsh. This claim rejection is overcome for reasons set forth below.

Claim 14 is a dependent claim which depends from claim 13, which in turn depends from claim 12 which depends from amended independent claim 1. Claim 1 is distinguished from the reference of Lee for reasons set forth above. Therefore, claims 12, 13 and 14 are similarly distinguished from Lee. The cited reference of Marsh has apparently been relied upon for providing "a locking shoulder that extends through an aperture for holding two members together", subject Office Action, page 8, lines 15-16. Applicants respectfully submit that the cited reference of Marsh does not make up for the above-stated deficiencies of Lee and therefore claim 14 is distinguished from the

references of Lee and Marsh and, as such, the rejection of claim 14 under 35 U.S.C. § 103(a) should be withdrawn.

IX. Rejection of Claim 15 under 35 U.S.C. § 103(a)

In paragraph 15 of the Office Action, dependent claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee and further in view of Tsai. This claim rejection is overcome for reasons set forth below.

Claim 15 depends directly from amended independent claim 1 which is distinguished from Lee for reasons set forth above. Dependent claim 15 is therefore similarly distinguished from Lee. The cited reference of Tsai has been relied upon for teaching "a ring-shape member . . . disposed about a section of the lamp for providing cushioning for the lamp". The reference of Tsai therefore does not make up for the above-stated deficiencies of Lee and claim 1 and therefore also claim 15 are distinguished from the reference of Lee in view of Tsai. Therefore, the rejection of claim 15 under 35 U.S.C. § 103(a), should be withdrawn.

X. Rejection of Claim 16-18 under 35 U.S.C. § 103(a)

In the Office Action, specifically in paragraph 16, claims 16-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee and further in view of Evanisko (US Pat. No. 5,394,314). Applicants respectfully submit that claim rejections are overcome for reasons set forth below.

Claims 16-18 are dependent claims that each depend from amended independent claim 1 which is distinguished from Lee for reasons set forth above. Therefore, dependent claims 16-18 are further distinguished from the Lee reference. Evanisko is not directed to a liquid crystal display panel and applicants submit that one

skilled in the art of liquid crystal display panels would not look to a macroscopic reflector for a cold cathode fluorescent tube to modify the structure of Lee. Even if one did look to Evanisko to modify Lee, Evanisko simply provides a reflector with a cross-sectional profile slightly greater than a semi-circle and wherein a lamp snap-fits into the reflector. The Evanisko reference is directed to a long tube that receives a cold cathode fluorescent tube and does not make up for the above-stated deficiencies of Lee. Therefore, claims 16-18 are each distinguished from the reference of Lee in view of Evanisko and therefore the rejection of claims 16-18 under 35 U.S.C. § 103(a) should be withdrawn.

XI. Rejection of Claims 20-23, 26, 29-32 under 35 U.S.C. § 103(a)

In paragraph 17 of the subject Office Action, claims 20-23, 26 and 29-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee. These claim rejections are overcome for the reasons set forth below.

As highlighted in Section III of this paper, amended independent claim 20 recites the feature of "a groove formed in the body [of the first member] for holding the lamp", "a second member ... for supporting the diffuser plate, the second member extending from the first member", and "the groove of the first member disposed beneath the second member". The Examiner concedes that Lee does not teach a first member (the member that is attachable to the lamp housing) having a groove of any type. Lee does not teach a second member for supporting a diffuser plate and extending from a first member with a groove. Amended independent claim 20 is distinguished from Lee for the reasons set forth in Section VI of this paper which discusses why independent claim 1 is distinguished from Lee. Dependent claims 21-23, 26 and 29-32 depend, directly or

indirectly, from independent claim 20 and recite further distinguishing features of applicants' invention. Claims 21-23, 26 and 29-32 are therefore also distinguished from Lee and the rejection of claims 20-23, 26 and 29-32 under 35 U.S.C. § 103(a) as being unpatentable over Lee, should be withdrawn.

XII. Rejection of Claims 24-25 and 27-28 under 35 U.S.C § 103(a)

In paragraph 24 of the Office Action, claims 24-25 and 27-28 were rejected as being unpatentable over Lee as applied to claims 23 and 26 and further in view of Marsh. These claim rejections are overcome based on reasons set forth below.

Claims 24-25 and 27-28 depend from amended independent claim 20 which is distinguished from Lee for reasons set forth above. Therefore, dependent claims 24-25 and 27-28 are also distinguished from the reference of Lee. The cited reference of Marsh has been relied upon for disclosing "lamp holders that mechanically and electrically coupled the lamps and include resilient sockets and clamps". Applicants respectfully submit that the clamps, and the shape of the clamps of Marsh, do not make up for the above-stated deficiencies of Lee and therefore claims 24, 25, 27 and 28 are also distinguished from the reference of Lee in view of Marsh. Therefore, the rejection of claims 24-25 and 27-28 under 35 U.S.C. § 103(a) should be withdrawn.

XIII. Rejection of Claim 33 under 35 U.S.C § 103(a)

In the Office Action, specifically in paragraph 25, claim 33 was rejected under 35 U.S.C § 103(a) as being unpatentable over Lee as applied to claim 32 and further in view of Marsh.

Dependent claim 33 depends, by way of intervening claims 31 and 32, from amended independent claim 20 which is distinguished from Lee for reasons set forth

above. Claim 33 is therefore also distinguished from the Lee reference. In the rejection of claim 33, Marsh was apparently relied upon for teaching a locking member including a locking shoulder that extends through an aperture. Marsh therefore does not make up for the above-stated deficiencies of Lee and therefore claim 33 is distinguished from the references of Lee and Marsh and the rejection of claim 33 under 35 U.S.C. § 103(a) should be withdrawn.

XIV. Rejection of Claim 34 under 35 U.S.C § 103(a)

In paragraph 26 of the Office Action, claim 34 was rejected under 35 U.S.C § 103(a) as being unpatentable over Lee as applied to claim 20 and further in view of Tsai. This claim rejection is overcome based on reasons set forth below.

Amended independent claim 20 is distinguished from the reference of Lee for reasons set forth above. The reference of Tsai has apparently been relied upon for teaching a ring-shape member disposed about a section of the lamp for providing cushioning for the lamp. Tsai therefore does not make up for the above-stated deficiencies of Lee and therefore claim 20 and claim 34 which depends from claim 20, is therefore distinguished from the references of Lee and Tsai and the rejection of claim 34 under 35 U.S.C. § 103(a), should be withdrawn.

XV. Rejection of Claim 35-37 under 35 U.S.C § 103(a)

In paragraph 27 of the Office Action, claims 35-37 were rejected under 35 U.S.C § 103(a) as being unpatentable over Lee as applied to claim 20 and further in view of Evanisko. These claim rejections are overcome based on reasons set forth below.

Amended independent claim 20 is distinguished from the reference of Lee for reasons set forth above and claims 35-37 depend from claim 20 and are therefore also

distinguished from Lee. The cited reference of Evanisko, not directed to a backlight assembly or to securing a plurality of lamps in fixed position, has apparently been relied upon, in this rejection, for teaching a cross-sectional profile slightly graded in a semi-circle and wherein a lamp snap-fits into the reflector. The cited reference of Evanisko is directed to a cold cathode fluorescent tube reflector that receives a tube therein and does not make up for the above-stated deficiencies of Lee. Therefore, claims 35-37 are distinguished from Lee in view of Evanisko and the rejection of these claims under 35 U.S.C. § 103(a) should be withdrawn.

XVI. Newly Added Claim 39

Claim 39 has been added to point out distinguishing aspects of the invention and is believed to be distinguished from the references of record and in allowable form.

CONCLUSION

Based on the foregoing, each of claims 1-39 is in allowable form and the application therefore in condition for allowance, which action is respectfully and expeditiously requested.

Respectfully submitted,

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Mark J. Marcelli, Reg. No. 36,593
Attorney for Applicants

DUANE MORRIS LLP
101 West Broadway, Suite 900
San Diego, CA 92101
Telephone: (619) 744-2200
Facsimile: (619) 744-2201
Attachment: Replacement Drawing that includes Fig. 4B.

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Amendment to the Drawing:

Please amend Fig. 4B of the drawing as indicated in the attached replacement page.